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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09,111,915 07/08/98 BOGGS

F-5366

IM62/0315

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F-8

EXAMINER

WARD, R

ART UNIT

PAPER NUMBER

1723

DATE MAILED:

03/15/00

Please find below and/or attached an Office communication concerning this proceeding.

Commissioner of Patents and Trademarks

RECEIVED
MAR 17 2000
FENWAL/PATENT LAW

CASE...	F-5366 US
DKT. DATE...	5-15-00 SEEN BY ATTY.....
FINAL DATE...	9-15-00 RESP. SENT.....
SUBJECT...	Office Action. Final.

CASE...	F-5366 US
DKT. DATE...	6-15-00 SEEN BY ATTY.....
FINAL DATE...	9-15-00 RESP. SENT.....
SUBJECT...	Notice of appeal.....

Office Action Summary

Application No.

09/111,915

Applicant(s)

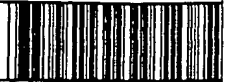
Boggs et al

Examiner

Richard W. Ward

Group Art Unit

1723



☒ Responsive to communication(s) filed on Dec 6, 1999

☒ This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

- ☒ Claim(s) 1-8, 10, 11, 37, and 40-45 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-8, 10, 11, 37, and 40-45 is/are rejected.
- Claim(s) _____ is/are objected to.
- Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All ☐ Some* ☐ None ☐ of the CERTIFIED copies of the priority documents have been received

received in Application No. (Series Code/Serial Number) _____

_____ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 7 and 8
- Interview Summary, PTO-413
- Notice of Draftsperson's Patent Drawing Review, PTO-948
- Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Election/Restriction

1. Applicant's election of claims 1-11 and 37-39 in Paper No. 6 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 12-36 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention.
2. This application contains claims drawn to an invention nonelected with traverse in Paper No. 6. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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4. Claims 1-5, 7-8, 10, 37, 40-41, and 43 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Mahendran et al (US 5,914,039). See especially: figures 2-4 (demonstrates rippled support and skin layer); column 3, lines 47-50 (hydrophilic coating); column 6, lines 18-43 and column 11, line 43 (polyester); column 7, line 35 (5% polymeric material); column 5, lines 45-51 (particle sizes); and column 5, line 62 (thickness).
5. Claims 1-8, 10-11, 37, 40 and 43-45 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by McAllister et al (US 4,957,957). McAllister et al [957] discloses a composite membrane comprising particulates, a non-fibrous matrix, and a skin layer (see column 11, lines 45-59), as recited in instant claim 1, and additionally discloses >50% particulates (column 4, lines 30-31) and supports (column 11, lines 3-12), as recited in instant claims 44-45. McAllister et al [957] also discloses: hydrophobic PVDF (column 7, line 5), as recited in instant claims 2-3; a sealed skin surface (column 11, lines 50-54) which contains fewer particles than the interior (i.e., a surface has less volume than the interior), as recited in instant claim 4; specific particle polymer ratios (column 8, lines 35-36 and column 4, lines 30-31), as recited in instant claims 5-6; contoured supports (column 11, lines 3-13), as recited in instant claims 7 and 40; polyethylene wovens and nonwovens (column 7, line 1 and column 11, lines 14-24); a thickness of 500 microns (column 16, line 25), as recited in instant claims 10-11; and hydrophilic coatings (column 11, lines 3-13), as recited in instant claim 43.
6. Claims 1-8, 10-11, 37, 40-41, and 44-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugiyama et al (US 4,728,432). Sugiyama et al [432] discloses a composite

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membrane comprising particulates, a non-fibrous matrix, and a skin layer (see column 3, lines 29-56; "skin" or surfaces are formed when "prepared by a known method of producing porous membranes), as recited in instant claim 1, and additionally discloses 70% particulates (column 3, lines 51-56) and supports (column 3, lines 21-28), as recited in instant claims 44-45. Sugiyama et al [432] also discloses hydrophobic polyurethane (column 3, line 47), as recited in instant claims 2-3; more particles in an interior than in a "skin" surface (see above), as recited in instant claim 4; 70 % particulate and 30 % polymer (column 3, line 53), as recited in instant claims 5-6; rippled polyester mesh supports (column 3, lines 14-28), as recited in instant claims 7-8 and 40-41; a 400 micron thickness (column 3, line 59), as recited in instant claims 10-11; and 10 micron particles (see claim 3), as recited in instant claim 37.

7. Claims 1-6, 40-42, and 44 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Andersen et al (US 5,660,903). See column 7, line 10 to column 8, line 37 -- especially column 7, lines 43-47 (texturing or pleating). As noted above, a "skin" layer may be interpreted as any exterior surface.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama et al [432] or McAllister et al [943]. Sugiyama et al [432] and McAllister et al [943] disclose all aspects of instant claim 42 except for a pleated support; however, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the same time the invention was made to utilize a pleated support in place of the generic supports of Sugiyama et al [432] or McAllister et al [943] for the purpose of achieving a desired degree of filtration for a particular separation application. Pleated supports are well-known in the membrane art -- e.g., Markley (US 3,746,175) -- and clearly fit into the genus of supports of McAllister et al (column 11, lines 14-24 -- pleating is good for achieving high thickness and is suggested by "spot welding") and Sugiyama et al (column 2, lines 49-54 -- pleated supports have "ruggedness").

Response to Arguments

10. Applicant's arguments filed 12/6/99 have been fully considered but they are not persuasive, or are moot (i.e., regarding the Hagen and Pall et al references) in light of new grounds of rejection

11. In response to applicant's argument that the references fail to show certain features of applicant's invention (page 6), it is noted that the features upon which applicant relies (i.e., "without the need for a chemical reaction") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read

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into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Mahendran et al [039] discloses particles blended with a polymer matrix, and thus meets the limitations of instant claim 1.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard W. Ward whose telephone number is (703)305-0536. The examiner can normally be reached on Monday-Friday from 7:00 AM to 3:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Walker, can be reached on (703)308-0457. The fax phone number for the organization where this application or proceeding is assigned is (703)305-3602.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose phone number is (703)308-0661.



R.W.W.

March 9, 2000


W. L. WALKER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700